

DOCUMENT RESUME

ED 230 715

CE 036 097

AUTHOR Miller, Harry
TITLE Adult and Continuing Education in the Armed Services.
PUB DATE Jun 83
NOTE 37p.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Access to Education; *Adult Education; Armed Forces; *College Programs; Continuing Education; *Degrees (Academic); Educational Cooperation; External Degree Programs; *Military Personnel; Military Service; *Military Training; *Postsecondary Education

ABSTRACT

Adult and continuing education programs of the armed services constitute one of the largest and most advanced public educational enterprises in the world. The central mission of military training is to prepare military personnel and maintain their competence at levels to ensure necessary support for national policy and security. Military occupational training programs are also a major recruiting attraction in terms of post-discharge career opportunities. Through the Voluntary Education Programs, opportunities are also provided for service personnel to enroll in college courses on an off-duty and part-time basis. All of the armed services provide their own formal training for on-duty enlisted personnel with military assignments requiring military occupational specialities. In addition to technical training, they provide opportunities to earn advanced postsecondary degrees in a variety of disciplines and occupational fields ranging from associate degrees through Ph.D. degrees. Military personnel are also encouraged to participate in educational programs on their off-duty time. Cooperative arrangements with civilian educational institutions provide on- and off-duty courses through the use of both military and civilian schools and allow for awarding of academic course credit for extra-institutional learning. (YLB)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED230715

ADULT AND CONTINUING EDUCATION IN THE ARMED SERVICES

by

Harry Miller
Dean
School of Technical Careers
Southern Illinois University
Carbondale, Illinois

June, 1983

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- ☒ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

H. Miller

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

CE036097

ADULT AND CONTINUING EDUCATION IN THE ARMED SERVICES

Introduction

Adult and continuing education programs of the armed services constitute one of the largest public educational enterprises in the United States. Only business and industry spend more money on/for education. However, no other organization has developed a comparable total educational environment to meet such a variety of unique needs. Present-day military education is extensive and multi-faceted, and provides some of the most advanced and sophisticated learning programs available to adults. It is a significant aspect of our country's total educational resource.

The scope and extent of military education is impressive. Major military installations are complete communities within which educational opportunities for military personnel and their families are made available. Examples of the range of military education include recruit training, overseas schools for dependent children, technical training, full-time and part-time graduate study, basic education, military academies, and post-secondary Reserve Officers Training Corps (ROTC). Several hundred military schools and resident facilities with classrooms, laboratories, study halls, libraries, media centers, and staff offices exist to deliver military education programs. In addition, military hospitals, health care centers and medical institutes provide opportunities for resident study and research as well as provide services to and training

for military service personnel. Programs are developed and taught by military and civilian personnel who are responsible for curriculum and instructional effectiveness. American military education is one of the largest and most advanced learning endeavors in the world today.

Rational for Military Training

The initial and continued training of military personnel is directed toward the teaching of specific military occupational skills. At present, there is no single educational system or institution responsible for the teaching of all skills required by the armed services. The central mission of military training, whether in peacetime or in war, is to train military personnel and maintain their competence at levels to ensure necessary support for national policy and security.

Education and training are a vital part of the national military defense program and are essential to the armed services, especially as skills needed to operate equipment become increasingly more complex. Constantly increasing technological complexities are continually requiring a higher level of education and training. As instruments of national policy and national defense, sophisticated weapon and logistical systems require an intensive and comprehensive educational base. As a result of increased military research and technological advancements in fields such as space and science, missilery, chemistry, and field weaponry, it is recognized that service personnel will need to be highly qualified to perform their assigned military occupation.

Technological, political, social and economic factors continuously affect change in the military. The demand on the training capabilities of the armed services to improve the preparedness of personnel for

combat is continuous. The military constantly seeks to improve the leadership skills and job performance of their personnel. Military training must be dynamic and responsive to the changing requirements of the armed services.

Military occupational training programs not only ensure quality troop performance, but are also a major recruiting attraction in terms of post-discharge career opportunities. Although the primary purpose of military training is to prepare service personnel for combat, the majority of training is applicable to civilian occupations. It is contended that almost 80 percent of those leaving the service have acquired skills which can be utilized in civilian life, either directly or with some retraining. This is particularly noteworthy since the Department of Labor indicates that by the mid-1980's over 70 percent of the American work force will require technical specialization and, consequently, most entry-level workers will need technical training. The opportunity to learn occupational skills is cited as one of the most important factors for enlistment into the armed services of young adults.

The armed services have contributed significantly to society's technological advancement. Military research and development have contributed, and continue to do so, to a number of diverse fields including communication, transportation, space science, medicine and cryogenics. In addition to advancements in technology and the training of personnel to utilize technology, the armed services have increased the educational level of citizenry and provided financial support for veterans to return to the classroom for further education.

The transferability and commonality that exists between military and civilian occupations constitutes a national resource of technical education. Civilian career plans and aspirations are documented as being enhanced through military training. The military services offer basic and advanced technical training for use in the military and/or civilian career development of individuals.

The armed services consider the opportunity to earn on-base academic degrees to be a means for personnel to learn marketable skills for civilian life, and also to be a means for them to rank promotions and admission to officer's training school. All four branches of the armed services (Army, Navy, Air Force and Marine Corps) offer degree-earning opportunities. Opportunities are designed to fulfill the need for longer and more complex training and to increase the educational level of service personnel.

Through the Voluntary Education Programs, the Department of Defense provides opportunities for service personnel to enroll in college courses on an off-duty and part-time basis.¹ Each branch of the armed services sponsors voluntary postsecondary education programs throughout the world. Off-campus courses offered are the same as those given as a part of on-campus college programs. Participating service personnel enroll in graduate and undergraduate courses to develop their technical and professional skills in order to perform their military jobs more effectively and to prepare themselves for useful and productive civilian careers. Voluntary Education Programs are primarily financed through a tuition assistance program. These funds are provided by the armed services to active duty military personnel for the payment of a portion of the expenses for their education. Under the tuition assistance

program, the services may pay up to 75 percent of tuition costs (fees and cost of books are not included).

Since World War II, vocational, academic, and personnel development courses have been made available. The awarding of credit for military experience and training courses was initiated in 1945 when the American Council on Education formed the Commission on Accreditation of Service Experiences.

Educational and Training Programs

The United States Department of Defense, created by Congress in 1949 and located in the Pentagon, provides civilian administration of the armed services with the Secretary of Defense as a cabinet level official. The Department's primary purpose is to provide leadership for the defense of the country and to ensure the security of areas vital to its interest. In fulfillment of its purpose of protecting national interests, educational programs administered by the Office of the Assistant Secretary of Defense for Manpower, Reserve Officer, and Logistics are designed to meet specific military occupational requirements, increase the general education level of service members and provide educational financial assistance in exchange for specified periods of active duty. The Assistant Secretary is also responsible for coordinating, reviewing, and establishing overall policies for all military training and education programs. Liaison is maintained with the Veterans Administration, the Department of Education, the Department of Labor, other appropriate Federal agencies, and national educational associations to implement educational opportunities for "citizens in uniform." The Secretaries for each of the military departments and the

commandant of the Marine Corps are responsible for providing educational staff, finances, and other necessary resources for the operation of educational programs.

The Department of Defense, through the four branches of the armed services, operates service academies, service colleges, and intermediate service colleges. Among these include:

Academies

U.S. Military Academy
U.S. Naval Academy
U.S. Air Force Academy

Senior Service Colleges

National Defense University
(comprising National War College and Industrial College
of the Armed Forces)
Army War College
Naval War College (College of Naval Warfare)
Air War College

Intermediate Service Colleges

Naval War College (College of Naval Command and Staff)
Armed Forces Staff College
Army Command and General Staff College
Air Command and Staff College
Defense Systems Management College
Marine Corps Command and Staff College

Whereas the primary purpose of the service academies is to prepare career service officers, the Senior Service Colleges (War Colleges) and the Intermediate Service Colleges prepare selected career officers at suitable points in their careers, for advanced military positions in their respective branch of the service. The Senior Service Colleges are the last formal educational stage in the professional military development of officers. The war colleges of the Army, Navy and Air Force emphasize service missions. The National War College and the Industrial College of the Armed Forces are a part of the National Defense University. The

National Defense University prepares selected officers from the services for senior military positions in the Joint Staff and throughout the Department of Defense.

The Intermediate Service Colleges exist to prepare selected, promising officers for staff positions at the division, wing, unified command, specified command and joint staff levels. These colleges rely heavily on military faculty to teach military subjects. Civilians do not normally study these subjects nor are they likely to be qualified to teach them.

Military education basically consists of training related to the performance of military operations and of voluntary education which allows personnel to pursue educational degrees. These are used as incentives in recruitment and each branch of the service is expanding educational programs and opportunities for their members.

All of the armed services provide their own formal training for on-duty enlisted personnel military assignments requiring military occupational specialties. Military occupations are jobs for which enlisted personnel are trained and in which they are employed. A number of these occupations are similar among all the services, in training provided and skills and duties required. Successful completion of basic and technical training qualifies enlisted personnel for positions in the job structures of the service and enables them to progress in experiences and rank promotion.

Basic or recruit training for each branch of the armed services provides the orientation and basic skills which give service personnel the fundamental knowledge and physical conditioning necessary for effective military service. The mission of such training is to assist

newly enlisted personnel in the transition from civilian to military life and to prepare them for further specialized training. Classes are conducted concerning service regulations, handling and care of weapons, military courtesy, drill and ceremonies, military justice, personnel services, hygiene and sanitation, military insignia, organization and mission, first aid and other subjects related to the particular service concerned. Classroom work is mixed with field training and practical experience. Recruits are usually given aptitude and classification tests and are interviewed by counselors during the training period. Basic training is the first step in the sequence of educational development of recruits and, for those who qualify, technical education is the second step.

Technical skill training includes all formal training normally given immediately after basic training which leads to the awarding of military occupational specialties or ratings at the lowest skill level. Generally personnel are assigned to technical training based on tests given during basic training and the need of the particular branch of the armed services in which they serve. Some skills can be acquired through experience or on-the-job training; however, most skills are primarily learned through formal coursework.

There are a large number of technical specialties available to enlisted personnel. Some specialties represent highly technical occupations such as nuclear reactor specialist or electronics technician. Others are less complex, such as cook, clerk-typist, or automotive mechanic. Whatever the specialty, the types of duty and the areas to which service members may be assigned (overseas and within the United States) depend on the mission of the service and qualifications and

desires of the person. Other requirements for duty assignment may include rank or rating, time left on current enlistment, past record of conduct and performance of duty and eligibility for transfer.

U.S. Air Force. The Air Force provides most of its technical training at seven technical training schools located at Chanute AFB, Keesler AFB, Lowry AFB, Sheppard AFB, Lakeland AFB, and Goodfellow AFB. Each school is divided into training groups with resident courses. At Lowry AFB, the Technical Training School, the school is organized into training groups with instruction given in aerospace munitions, audio-visual avionics, intelligence, logistics, special instruments, safety, and disaster preparedness. Approximately 20,000 students are graduated annually from the more than 270 resident courses. The Technical Training School at Chanute is organized into four training groups including such instructional areas as in missiles and weather, aircraft maintenance, and weapon systems support. Each year at Chanute, about 25,000 men and women are graduated from more than 200 resident courses.

Each of the Air Force technical schools focuses on particular operational needs. Training is intensive with concentrated instruction ranging from 5 to 7 hours a day in the classroom, laboratory, or shop. Most of the courses are short in duration, lasting from two weeks to several months. Upon graduation, students are given military assignments at installations for on-the-job training, during which time they apply the knowledge and skills they have learned.

The U.S. Air Force sponsors a variety of other educational programs to maintain a technologically trained and educated service force. One of the most distinctive forms of post-secondary education is the Community College of the Air Force (CCAF).

The CCAF was founded in 1972, accredited in 1973 by the Southern Association of Colleges and Schools, and established permanent administrative headquarters in 1979 at Maxwell AFB in Alabama. CCAF was given authority in 1977 to grant two-year associate degrees by the U.S. Commissioner of Education. This authorization was provided by Congressional passage of P.L. 94-361.

The CCAF integrates training provided by the seven Air Force technical schools and voluntary education offered by civilian institutions into an associate degree program. Over eighty different job-oriented programs are offered in the following five major areas:

- Aircraft and Missile Maintenance
- Electronics and Telecommunications
- Health Care Sciences
- Management and Logistics
- Public and Support Services

Each program provides for awarding an Associate in Applied Science degree upon completion of a minimum of 64 semester hours of Air Force and civilian instruction. Each program requires at least 24 semester hours in technical education (part or all of which may be taken at Air Force technical schools), 21 semester hours in areas of general education (most of which is provided by regionally accredited civilian colleges and universities), 6 semester hours in management education (which may be taken from either Air Force schools or civilian institutions), and 4 semester hours of physical education (awarded for successful completion of basic military education).

The primary purpose of CCAF is to provide educational opportunities to Air Force personnel to enhance occupational skill competence, which allows for recognition of its personnel by the Air Force through promotions and job specialty assignments. Further recognition is given

by society as a result of the awarding of college academic credit and degrees verifying educational achievements. CCAF's goals are:

1. To contribute to the development of non-commissioned officers' leadership role within the increasingly sophisticated and complex technology of the Air Force.
2. To integrate military instruction and voluntary education of airmen into consistent, meaningful patterns of growth toward attainable career related objectives.
3. To have Air Force instruction recongnized for its full value by those organizations which set standards for individual qualifications and institutional excellence.
4. To improve the educational and career-related incentives for recruitment and for the retention of high-quality Air Force personnel.²

The CCAF is designed to draw upon existing educational resources and educational opportunities offered by civilian institutions. The Air Force has created a worldwide community of enlisted personnel with unique educational needs. Enlisted personnel need continual education if they are to serve effectively while in the Air Force and if they are to be adequately prepared for future civilian careers. The role of non-commissioned officers is unique in that it demands a special combination of occupational, general, and managerial skills.

CCAF is essentially an educational broker. It documents and expresses in terms of conventional record keeping training completed by Air Force personnel in basic training and service schools. Using transfer credit from civilian institutions, an associate degree is earned which allows personnel to pursue rank promotions and new career options after re-entering civilian society.

Air University is an educational system charged with the conduct of professional education and research through military schools and colleges to provide the preparation and training of Air Force personnel for higher levels of command. These schools include the Air War College, the Air Command and Staff College, the Squadron Officer School, the Academic Instructor and Foreign Officer School, the Air Force Reserve Officer Training Corps, the Extension Course Institute, the Air University Institute for Professional Development, the Air Force Chaplain School, the Air Force Leadership and Management Development Center, the USAF Senior Noncommissioned Officer Academy, the Air University Library, and the Air Force Institute of Technology.

Of particular importance to Air Force education is the Air Force Institute of Technology (AFIT) which was established in 1919 as the Army Air School of Application. It developed as a graduate master level institution with accredited programs in science, engineering, and management disciplines.

AFIT offers programs responsive to the Air Force's specific training needs, the use of military systems and classified material in instruction, laboratory work, the conducting of research in the context of Defense research and development acquisition, operations, tactics and resource allocation, and the offering of interdisciplinary programs in operational warfare specialties. The dependence of air warfare on technology necessitated an on-duty graduate education for military officers in engineering and science.

Approximately 46% of the Air Force line officers take advantage of graduate education conducted by civilian institutions. The range of AFIT programs is limited to those areas of study which require specific

service orientation or are simply unobtainable from civilian institutions. Generally, civilian institutions are not equipped to educate officers for warfare specialties.

Programs offered by AFIT are directed to specific Air Force needs and utilize unique advantages of the service. Among the advantages are:

1. Direct connections to the users of the program graduates and sensitivity to current and future military service needs;
2. Faculty who are knowledgeable in military concerns, are actively engaged in research of direct interest, and are in frequent contact with military laboratories and commands;
3. Classified libraries and the ability to offer classified courses;
4. Extensive military computer facilities available for use in the educational and research programs; and
5. An environment which keeps students in touch with current military operations and with other military officers of different backgrounds.

AFIT operates resident graduate degree and continuing education programs and administers the enrollment of all fully-funded Air Force students attending civilian institutions. It consists of the School of Civil Engineering, the Civilian Institution Programs, and the School of Systems and Logistics. The North Central Association of Colleges and Schools accredited AFIT as a master's degree level institution in 1960 and the doctoral program received full accreditation in 1972.

AFIT's resident curricula are not normally found at civilian colleges and universities. Resident continuing education programs are also tailored to Air Force requirements. Research activities are also oriented toward the needs of the Air Force. The institution and its program are used by all branches of the armed services, other federal agencies, and the armed services of allied nations.

U.S. Navy. In the Navy, technical training is determined either at the time of recruitment prior to enlistment or during basic training. Job entry technical training is provided by over 74 naval schools referred to as Class "A" Schools. Such schools teach the fundamentals and basic skills needed to perform duties at lower levels of responsibility. Class "A" Schools include aviation maintenance administration, fire control technician, hospital corpsman, sonar technician, and torpedoman's mate.

Advanced training is provided by Class "C" Schools where advanced knowledge, skills, and techniques are taught to qualify individuals for jobs usually identified by a Navy Enlisted Classification Code designation. Generally, attendance at Class "C" Schools increases opportunities for further promotion and more desirable occupational assignment.

The Naval Postgraduate School (NPS), located in Monterey, California, was established in 1909 to provide advanced education in marine engineering. Between 1945 and 1948, the U.S. Congress granted approval to award the Bachelors, Master's and Doctor's degrees. In 1949, the School was accredited by the Engineers' Council for Professional Development. The School became fully accredited in 1962 as a member of the Western Association of Schools and Colleges. Since 1946, NPS has awarded 6,047 bachelor's degrees, 8,229 master's degrees, 255 engineer's degrees, and 91 doctoral degrees.³ Certificates of completion were authorized for students who complete non-degree programs.

At present, the School emphasizes graduate level education for full-time officers students and officers participating in continuing education on a part-time basis.

The overall mission is "To conduct and direct the advanced education of commissioned officers, and to provide such other technical and professional instruction as may be prescribed to meet the needs of the naval service; and in support of the foregoing, to foster and encourage a program of research in order to sustain academic excellence." To achieve this mission, NPS provides:

1. Resident studies including graduate programs in specialties and graduate preparatory courses necessary to support advanced programs.
2. Short courses (2-6 weeks) on and off the NPS campus to maintain currency in specialties and to convey new technology to officers.
3. Off-campus credit courses to improve officer performance and to reduce time required on the NSP campus.
4. Sponsored research that supports the educational program and offers solutions to operational problems.
5. Central administration of full time, funded naval officer students enrolled at civilian graduate institutions, except officers in medical specialties.

Some curricula offered are:

- Administrative Sciences (Material Management,
Manpower/Personnel Analysis, Human Resources Management,
Financial Management)
- Aeronautical Engineering
- Command, Control and Communication
- Computer, Technology
- Electronics and Communications
- Environmental Sciences
- Naval Engineering
- Naval Intelligence/National Security Affairs
- Operations Research/Systems Analysis
- Weapons Engineering

The Naval Postgraduate School Continuing Education program had its formal beginning in 1974 as a means of providing extended educational services for naval personnel. These services include off campus self-study credit courses, delivery of short courses off campus, and educational counseling.

Self-study graduate preparatory courses are delivered off campus by self-paced programs for the same academic credit as received when taken on campus. Self-study courses are delivered to officers at their current duty assignment for study during off-duty hours. These courses are normally taken from the initial phase of curricula. Course completion enhances selection for postgraduate education, reduces course requirements in on-campus programs, and provides study experience in graduate education.

Another aspect of the Navy's program in the Navy Campus (previously referred to as the Navy Campus for Achievement) which is a voluntary participation in off-duty educational experiences. The Navy Campus is a management system for a collection of educational programs. It coordinates the participation and offerings of secondary and post-secondary educational offerings by accredited institutions and military schools. Generally, participating institutions are agreed to providing non-traditional programming, to offering credit for on-the-job experiences, to providing flexible credit transfer, and to waiving residency requirements. The Navy Campus provides educational counseling and advisory services for short- and long-term careers at major shore installations.

The Navy Campus voluntary education program for personnel who are on active duty aboard ship is the Program for Afloat College Education (PACE). This program provides full cost of instruction for personnel at

sea through contracted agreements with civilian colleges and universities. Navy personnel in PACE study at the postsecondary level in academic and vocational/technical subjects.

Another program is the Navy Campus High School Studies Program (NCHSSP) which offers instruction in basic skills such as reading, mathematics, English, science, or the completion of a high school diploma. Preparation classes are provided for the high school level General Education Development Examination (GED). Basic skill training is provided to personnel while they are on-duty whereas the GED preparation must be taken during off-duty time.

In conjunction with the Department of Labor, the Navy Campus offers an Apprenticeship Training Program. Apprenticeships are available in three ratings. These include instrumentman, photographers' mate, and mess management specialist. Hourly work experiences in the Navy are applied to apprenticeship certification.

The Navy Campus also provides non-credit courses to Navy personnel at shore installations. Courses are conducted by civilian and military instructors. The range of topics are varied and ranges from foreign languages to human relations.

U.S. Army. In the Army, the objective of technical and advanced training is to provide a level of instruction appropriate to individuals either returning to this level of the Army's school system or those who have recently completed initial skill training. This level of training is designed to upgrade and/or modify previously acquired skills, thereby providing greater proficiency in order to qualify persons for positions of greater responsibility. The length of training varies in relation to the technical aspects of the skill for which an individual is being

trained. Training effectiveness is measured by a combination of performance oriented training and demonstrated mastery of the subject as determined by testing.

The Army Continuing Education System (ACES) is an administrative system of educational opportunities, academic and nonacademic, overseas and state-side, for soldiers. It is the term used to designate all the voluntary educational opportunity options the Army provides. It is an Army-wide system which provides uniform educational opportunities and meets educational needs at the Army post level. Army personnel are able to continue in a particular program without suffering educationally as they are assigned from post to post.

The primary objectives of ACES are 1) to enhance the Army's readiness by providing opportunities for individual and professional growth, 2) to provide educational opportunities at least equal to those available in civilian life and thus attract and keep qualified Army personnel, and 3) to develop career goals appropriate to military service and postservice employment. Participation in ACES programs is voluntary; however, soldiers are urged to take advantage of program opportunities. ACES programs deemed necessary to improve skills related to duty assignments are offered during normal duty time.

There are a number of ACES programs available to Army personnel. The Basic Skills Education Program (BSEP) is one of the primary voluntary and on-duty education programs for enlisted Army personnel and is designed to provide educational competencies required for job performance, skill qualification, and career growth. Advancement in the BSEP program is coordinated with the opportunity for Army personnel to advance in their military specialty and careers. BSEP is implemented in three

phases: BSEP I, BSEP II, and BSEP III. BSEP I is an on-duty remedial education program conducted at the initial entry training level to provide Army personnel with basic instruction in reading and arithmetic through a 5.0 grade level. It also provides English-as-a-Second Language (ESL) instruction for those with a primary language other than English. All first team enlistees are tested to determine basic educational skills deficiencies. The purpose of this type and level of educational experience is to enhance the capability of personnel to understand later training and thus reduce attrition caused by educational deficiencies.

BSEP II provides foundation instruction to raise educational competencies, especially in language and computational skills, to a 9.0 grade level. Educational competence at this level is deemed necessary for effective performance at certain Army occupational skill levels. Upon BSEP II completion, Army personnel are counseled regarding the possibility of entering an off-duty High School Diploma Program, taking the General Education Development (GED) Test for a State-issued GED High School Equivalency Certificate, or participating in other Army career education programs.

Unlike BSEP I and II, BSEP III provides functional rather than foundational instruction. That is, BSEP III provides instruction to raise specific educational competencies related to military occupational specialty task requirements, immediate job performance, or career growth. It provides for development of specific educational skills needed for advancement. Completion of BSEP I and II is not a prerequisite for participation; however, an adequate foundation in basic educational skills is needed.

Enrollments in BSEP programs are approved by post commanders whose decisions are usually based on the advice of educational counselors. As Army requirements become more defined and standardized, consideration is being given to development of specific competencies rather than raising the general literacy level as measured by reading grade levels.

The High School Completion Program (HSCP) provides Army personnel the opportunity to earn a high school diploma or a State-issued high school equivalency certificate during off-duty hours. The GED certificate has the same acceptability in the state where issued as a regular high school diploma for admission into a postsecondary education program and for obtaining employment, including state civil service positions.

An HSCP program is available to all active duty Army personnel through education centers on Army posts. Tuition assistance is available for this level of education. Personnel may be enrolled in a BSEP III program while attending an off-duty HSCP program. BSEP I and HSCP form a continuum of educational opportunities for those who do not possess a high school diploma.

Associate degree programs are also available on an off-duty basis and are under ACES supervision. Army personnel are typically awarded associate degrees for academic or technical programs for study from two-year community or junior colleges.⁴ There are many four-year colleges and universities that also award associate degrees.

The Servicemember's Opportunity Colleges Associate Degree (SOCAD) which is described more fully later provides the opportunity to earn an associate degree with minimum loss of credit due to frequent moves. Member institutions as SOCAD, agree to accept transfer credits, award

credits for military experience, and offer courses required for an associate degree.

Baccalaureate and Graduate Degree Programs offer the opportunity under ACES supervision to complete or work toward a bachelor's or graduate degree while serving in the Army. Each major post has bachelor and graduate programs available on post or within reasonable distance. Programs are provided that support the post's educational needs.

Skill-oriented education programs provide the opportunity to earn recognition within the civilian sector for skills learned in the Army, e.g. Army apprenticeships which are registered with the Bureau of Apprenticeships and Training in the U.S. Department of Labor. Army service schools have registered their apprenticeship programs for trades corresponding to military occupational specialties. Certificates are the same as those awarded to civilian apprentices. Industry recognition is designed for skills not covered by apprenticeships. It also includes skills for which apprenticeship recognition is available when recognition does not go beyond a journeyman level. A documented record of Army skills is provided to civilian employers upon release from the Army.

Some military occupational specialties correspond to civilian occupations that require licensing or certification as a prerequisite for employment in certain states. Such occupations and the state regulating agency are identified by ACES counseling staff.

There are a number of programs within ACES available through the Army education centers. Educational programs deemed important by the post commander to improve skills related to military assignments are provided during duty time while other programs are offered during

off-duty time periods. The needs of the post and its mission determine educational programs to a great extent.

U.S. Marine Corps. After basic training, enlisted personnel are assigned to an occupational field and specialty or to an on-the-job training program. There are over 500 basic and advanced occupational training schools. Some of the occupational fields include ammunition and explosive ordinance disposal, intelligence, military police and corrections, weather service, and ground electronic warfare. Assignments usually consist of sea duty, embassy duty, fleet marine force, barracks duty, inspector-instructor duty and drill instructor.

A number of special educational programs are available to marines. An off-duty high school completion program, Servicemember's Opportunity Colleges (SOC), and the Defense Activity for Non-Traditional Educational Support (DANTES) and apprenticeship programs are all a part of the Education Programs of the Marine Corps.

The Department of Labor and the Marine Corps in 1977 signed an agreement for the implementation of an apprenticeship program for Marines in apprenticeable military occupational specialties. Military schools were designated program sponsors for developing the apprenticeship program within their areas of responsibility. Completion of the training programs qualifies specialists for journeyman status. The Marine Corps apprenticeship program has been developed for such positions as automotive mechanic, air conditioning/refrigeration mechanic, lithographer, electrician, and welder. There were over 42 military occupational specialties approved for apprenticeship programs.

Another program is the Marine Corps Extension School which provides educational opportunities to increase professional knowledge and enhance careers for officers and noncommissioned officers unable to attend appropriate-level resident schools. Course completion satisfies requirements met at resident Marine schools including duty assignments, promotion, and qualification for attendance at other Marine schools.

Extension School courses are designed and structured to parallel closely the corresponding resident school instruction. The Extension School offers four types of courses:

1. The Staff Noncommissioned Officer Academy Extension Course (SNCOAEC) which corresponds to the professional instruction presented to Marine staff noncommissioned officers in the resident Staff Noncommission Officer Academy program.
2. The Basic School Extension Course (TBSEC) which corresponds to professional instruction presented to Marine Corps lieutenants in the Basic School resident course.
3. The Marine Corps Amphibious Warfare School Extension Course (MCAWSEC) which corresponds to professional instruction presented to Marine Corps captains in the resident program of the Marine Corps Amphibious Warfare School.
4. The Marine Corps Command and Staff College Extension Course (MCC and SCEC) which corresponds to professional instruction presented to Marine Corps majors and lieutenant colonels in the resident program at the Marine Corps Command and Staff College.

Each of the four courses consist of a series of subcourses designed to develop essential military knowledge and skills. Subcourses, the

basic unit of instruction, deals with a specific subject area and may consist of from one to eight lessons. The final lesson consisting of an examination of each subcourse must be submitted for grading. A grade of 74 percent or higher is required for satisfactory subcourse completion. Military personnel receiving below 74 percent are required to take the examination over again until a pass has been earned.

All commissioned officers and sergeants and above of both the regular and reserve components of the military services are eligible to enrollment. Foreign military personnel and civilian employees of the U.S. military services are eligible for admission on an application basis.

Off-Duty Educational Systems

Each branch of the armed services encourages its military personnel to participate in educational programs on their off-duty time. A comprehensive worldwide network of degree oriented voluntary educational opportunities ranging from associate to Ph.D. degrees is especially viewed as an essential factor in the competitive recruitment of quality young men and women. Instructional offerings are contracted by military installations with accredited colleges and universities. Courses and programs are provided on or near military installations. Curricula requirements are the responsibility of the institutions offering the instruction and not the Department of Defense. Off-duty postsecondary education for military personnel is a major segment of the total military education program.

According to the Department of Defense Directive 1322.8 on Voluntary Educational Programs for Military Personnel, "Educational programs shall be established to provide opportunities for military

personnel to achieve educational, vocational and career goals to further the belief that Military Service Members, as citizens in uniform, should share the same opportunities for education that are provided all eligible citizens." The purposes of such programs are to improve the competence of active duty personnel, to facilitate career advancement, and to strengthen the quality of military personnel in the armed services.

Funding for military personnel participation in educational programs is provided by Department of Defense tuition assistance and Veterans Administration G.I. Bill educational benefits. Tuition assistance is primarily used by enlisted personnel pursuing less than graduate level courses of study.

At each major military installation, education service officers (ESOs) are responsible for off-duty educational programs provided by civilian academic institutions. They arrange for civilian schools to provide on-base programs, ensure that course offerings are in accordance with established base educational plans, publish a consolidated catalog of programs, courses, and time schedules and arrange for classroom, laboratory and library facilities. The military believes educational programs should lead to degrees or certificates, support the training specialties or missions of installations, provide skills to upgrade abilities essential to military occupations and have application to civilian and military careers.

Cooperative arrangements with civilian educational institutions have provided a variety of off-duty, on-base degree programs. Among these are associate degrees such as business administration, public administration, accounting, drafting, and design technology; baccalaureate degrees in health sciences, occupational education,

industrial technology, and business administration; master's degrees in music, administrative sciences, adult and community college education, public administration and counseling psychology; and Ph.D. degrees in leadership and human behavior.

Three major off-duty educational programs are available to all military personnel regardless of their branch of service. One program is the Defense Activity for Non-Traditional Education Support. DANTES operates in all the services voluntary education programs with the Navy acting as executive agent. It was created in 1974 with two basic missions: (1) To administer nationally recognized credit or certification by examination programs, i.e.: College Level Examination Program (CLEP), General Educational Development Test (GED), American College Testing Assessment Program (ACT), Scholastic Aptitude Test (SAT) and DANTES Subject Standardized Test (DSSTs), and (2) to facilitate the availability of independent study courses and programs (correspondence study) from civilian educational institutions for service men and women. DANTES publishes the Independent Study Catalog which contains a comprehensive inventory of nationally available independent study courses and programs from regionally accredited colleges and universities. DANTES also publishes the DANTES Examination Program Handbook which is a guide to participation in examination programs.

DANTES is a partnership between civilian and military educational efforts. It represents a shift from strictly military development of courses and examinations by making use of educational opportunities from civilian sources.

DANTES operates a transcript service to civilian institutions in order to award credit from the United States Armed Forces Institute (no

longer in operation) for courses and examinations completed prior to 1974. It operates under the policy control of the Department of Defense and as a shore activity of the Chief of Naval Education and Training at the Navy's Ellyson Center, Pensacola, Florida.

The Servicemembers Opportunity College (SOC), established in 1972 by civilian and military education leaders to encourage voluntary education for armed service personnel is a cooperative network of colleges and universities. Its primary purposes are to coordinate administrative requirements and improve access to academic programs. SOC emphasizes improved academic coordination for students, quality consistency among programs and consistency among specific program requirements. It is responsible for developing criteria for the conditions and standards which enhance coordination and cooperation among member institutions. Increased educational opportunities are strived for by encouraging institutions to participate and work together.

More specifically, SOC encourages cooperation by

1. serving as a liaison between educational institutions and military bases;
2. serving as a catalyst to widen the educational network which provides learning opportunities to service personnel;
3. defining and helping to clarify the roles and responsibilities of the military and higher education communities;
4. interpreting the linkages and arrangements between civilian institutions and individuals through on-site SOC counselors and SOC staff activities.

SOC is jointly sponsored by the American Association of State Colleges and Universities and the American Association of Community and Junior Colleges with the assistance of twelve higher education associations and the four branches of the armed services.⁵ The SOC officers are at the American Association of State Colleges and Universities' headquarters in Washington, D.C. Funds for the network are provided by the Department of Defense and a grant from the Carnegie Corporation.

The creation of SOC was based on the special needs of military personnel. Because of frequent transfers and odd duty hours, military students face educational obstacles less frequently and perhaps never encountered by full-time civilian students. The obstacles encountered by military personnel typically included credit transfer difficulties, inadequate academic, personal and financial counseling, inaccessibility of coursework and limited recognition of military credit for in-service training. In response to the educational obstacles which confront military personnel, member SOC institutions have agreed to the following policy and procedure criteria:

1. Flexibility of entrance requirements
2. Increased opportunities for learning
3. Opportunity to complete interrupted academic course work
4. Special academic and financial aid counseling
5. Credit for in-service educational experience and other extra-institutional learning
6. Adaptability of requirements for resident students
7. Liberal credit transfer policy
8. Liaison among institutions and military bases
9. Publicizing SOC opportunities

10. Continuity of commitment to the student during and after service.

SOC member institutions provide a variety of programs. An entire institution or specific divisions or degree programs within an institution may be included. Member institutions confer external degrees, usually baccalaureate and/or associate degrees. Most institutions offer on-base programs and some serve military installations overseas. There are member institutions which offer neither on-site nor adjacent services but are coordinators for students transferring credits back to a home institution. SOC schools offer a "contract for degree" option which means that instead of getting a degree from the last institution attended, military personnel may elect to receive their degree from an institution selected earlier in their academic career. All credits earned elsewhere are transferred back to the institution granting the degree.

Among the SOC member institutions network, smaller networks exist, in which institutions link together to provide specific programs for military personnel. The SOC Associate degree Program for Military Personnel (SOCAD) assures servicemen and women the opportunity to continue progress toward an associate degree regardless of their military duty station. There are more than seventy-five SOC institutions participating in the SOCAD program. Other networks, which are being developed, will offer associate degrees in technical areas that are aligned with military occupational specialties.

SOC publishes a membership directory which provides a list of over 300 member institutions, their locations, degree conferred, and the military installations they serve. Each SOC directory entry also identifies an institution, participating divisions and counselors whom

prospective students may contact. Military personnel can also receive SOC information from their educational services officers.

Finally, another means of securing credit for military educational programs is the American Council on Education's Office on Educational Credit. The American Council on Education is composed of higher education institutions and national and regional associations. It was founded in 1913 to provide coordination of postsecondary education. The Office of Educational Credit (OEC) is primarily concerned with the credit and credentialing policies and practices in postsecondary education. Through the OEC's Commission on Educational Credit, the Office provides services that assist institutions in determining and awarding academic course credit for extra-institutional learning. OEC makes credit recommendations for formal courses offered by such non-collegiate sources as business, armed forces, government agencies, voluntary and professional associations and labor unions. There are seven areas in which OEC currently functions:

1. Educational Credit and Credentials
2. The Program in Noncollegiate Sponsored Instruction
3. The Home Study Evaluation Program
4. Evaluation of Formal Military Training
5. Occupational Assessment Programs
6. The College-Level Examination Program (CLEP)
7. The General Educational Development (GED) Testing Service

The evaluation of formal military training has been a function of OEC since 1945. The Guide to the Evaluation of Educational Experiences in the Armed Services is published regularly and is the standard reference for granting credit for military learning experiences.

Containing over 7,000 courses offered by the Department of Defense and all branches of the armed services, the Guide contains recommendations for educational credit for each course. The Guide's primary users include officials of postsecondary institutions, apprenticeship and training directors, and labor union officials. Users do not have to accept the credit recommendations and can modify them according to their own policies and practices.

Courses are reviewed by subject matter specialists. Visitations to service schools are conducted to examine or consider objectives, duration, methods of evaluation, instructor and student selection process, and applicability to postsecondary institutional programs. Service school courses must be given on a full-time basis and meet for a minimum number of contact hours of instruction a week. The evaluation of extra-institutional learning is based on the professional judgment of subject specialists and faculty members from a variety of postsecondary institutions and associations. Earned credits can be applied toward vocational certificates, associate (lower-division baccalaureate) degrees, baccalaureate (upper-division) degrees, and graduate degrees.

Conclusion

Military education in all branches of the armed services is a significant aspect of the total educational environment of our society. For many young adults, it provides basic skill training and completion of a high school degree. For others, it provides opportunities to earn advanced postsecondary degrees in a variety of disciplines and occupational fields ranging from associate degrees through Ph.D. degrees.

The providing of quality educational programs is an essential aspect of the military's efforts to enhance combat readiness and to offer opportunities for personal career growth. The recognition of the needs for postservice employment is a major commitment to facilitate the access of military personnel back into civilian life.

In order to achieve this twofold goal, the Department of Defense and each branch of the armed services have initiated and cooperated with professional associations in designing educational programs that allow military personnel to advance in their education through the providing of on- and off-duty courses and through the use of both military and civilian schools. Formal acknowledgement and recognition of military education through the awarding of degrees offered by civilian post-secondary institutions are providing unique and innovative educational linkages that are expanding the nature and extent of educational programming offered to society in general. This educational innovativeness is enriching educational opportunity by making education available to a wider segment of American society.

FOOTNOTES

¹Voluntary Education Programs, as the term readily implies, are educational programs in which military personnel elect to participate and in which participation is normally limited to off-duty time or time when service personnel are not scheduled to perform official duties.

²Community College of the Air Force, 1979-81 General Catalog, pp. 1-4.

³Naval Postgraduate School, Catalog 1978-1979, Monterey, California, pp. 5-6.

⁴Some degrees awarded are the Associate in Arts, Associate in Science, Associate in Applied Arts, and Associate in Applied Science.

⁵Cooperating agencies include the American Association of Collegiate Registrars and Admission Officers, American Association for Higher Education, American Council on Education, Association of American Colleges, Association of American Universities, Education Commission of the States, National Association for Equal Opportunity in Higher Education, National Association of Independent Colleges and Universities, National Association of State Universities and Land Grant Colleges, and State Higher Education Executive Officers.

Selected Bibliography

- Allen, G. Jack and Andrews, Grover J. Final Report of The Case Study of Off-Campus Postsecondary Education on Military Bases: Summary, Conclusions, Recommendations. Washington, D.C.: Office of the Secretary of Defense, January, 1980.
- Alton, D. Ice. "Department of Defense Training: A Storehouse of Resources." American Vocational Journal 47 (May 1972): 20-23.
- Ashworth, I. and Lindley, W.C. "The Disgrace of Military Base Programs." Change 9, no. 2 (February 1977): 8, 61.
- Bailey, Stephen K. Academic Quality Control: The Case of College Programs on Military Bases. Washington, D.C.: American Association for Higher Education, 1979.
- Benson, George C.S. "Education in the Military--Some Critical Comments." Adult Leadership 21, no. 2 (June 1972): 47-49.
- Berry, David Christopher. Higher Education in the United States Army. New York: Carlton Press, 1977.
- Clark, Harold F., and Sloan, Harold S. Classrooms in the Military: An Account of Education in the Armed forces of the United States. New York: Institute for Instructional Improvement, Inc., 1964.
- Community College of the Air Force General Catalog, 1979-81, Maxwell AFB, Alabama.
- Department of Defense Directive. Voluntary Educational Programs for Military Personnel, No. 1322.8 (February 4, 1980).
- Edwards, Edwin. Final Report and Recommendations: Task Force on State, Institutional, and Federal Responsibilities in Providing Postsecondary Educational Opportunity to Service Personnel. Denver, Colorado: Education Commission of the States, 1977.
- "Enlistment Programs." Profile 23, no. 1 (October 1979): 3-5.
- Furlong, Raymond B. "Air Force Professional Education: Air University." Education 96, no. 4 (Summer 1976): 325-335.
- Houle, C.O. The Armed Services and Adult Education. Washington, D.C.: ACE, 1947.
- Jones, David C. "An Overview of Air Force Education." Education 96, no. 4 (Summer 1976): 3-7-310.
- Keepke, Lyle O. "Strange Bedfellows or Innovative Partners." Community and Junior College Journal 49, no. 4 (December/January 1978/79): 31-40.

MacTaggart, T. "New Consumers in Higher Education: Extended Programs for Military Students." North Central Association Quarterly 51, no. 2 (Fall 1976): 288-295.

Maloy, William L., Gager, William A., Jr., and Sullivan, Eugene. "Continuing Education Within the Department of Defense." In Materials and Methods in Continuing Education. Edited by Chester Klevins. Los Angeles: Klevins Publications, Inc., 1978.

Masland, John W., and Radway, Lawrence I. Soldiers and Scholars: Military Education and National Policy. Princeton, New Jersey: Princeton University Press, 1957.

Military - Civilian Occupational Source Book. 2nd edition. Fort Sheridan, Illinois: United States Military Enlistment Processing Command, January, 1978.

Naval Postgraduate School Catalog, 1978-1979, Monterey, California.

Peterson, E.C. A Survey of the Administration of Pacific Air Force Bases Education Services Program. Unpublished dissertation, School of Education, University of Southern California, 1977.

A Report to the House Appropriations Committee. Graduate Education in the Department of Defense, Department of Defense, March, 1979.

Stark, Irwin. "The Pentagon Goes to School" The Progressive 43, no. 10, (October 1979): 22-26.

A Summary of Voluntary Education in the Armed Forces. Deputy Assistant Secretary of Defense (Education), Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs), May 3, 1974.

United States Department of Defense. Counselor's Guide. Fort Sheridan, Illinois Military Enlistment Processing Command, 1977.

Department of Defense. Educational Opportunities on Air Force Bases. AF Pamphlet 213-2, January, 1978.

Air University Catalog, 1979-80, Maxwell AFB, Alabama.

Air Force Institute of Technology Catalog, 1979-81, Wright-Patterson AFB, Ohio.